.H: Robinson

PAGE:

1

44

1653

DATE: 02/02/200 TIME: 09:31:32

PATENT APPLICATION US/09/068,377

Input Set: I068377.RAW

This Raw Listing contains the General Information Section and up to first 5 pages.

RAW SEQUENCE LISTING

```
<110> APPLICANT: Lasky, Laurence A.
 1
 2
          Dowbenko, Donald J.
 3
     <120> TITLE OF INVENTION: Tyrosine Phosphorylated Cleavage Furrow-Associated
           Proteins (PSTPIPs)
 5
     <130> FILE REFERENCE: P1066P2
     <140> CURRENT APPLICATION NUMBER: US/09/068,377
 6
                                                               ENTERED
     <141> CURRENT FILING DATE: 1999-05-08
     <150> EARLIER APPLICATION NUMBER: US 08/938,300
     <151> EARLIER FILING DATE: 1997-09-29
 9
10
     <150> EARLIER APPLICATION NUMBER: US 08/798,419
     <151> EARLIER FILING DATE: 1997-02-07
11
12
     <160> NUMBER OF SEQ ID NOS: 73
13
     <210> SEQ ID NO 1
     <211> LENGTH: 415
14
     <212> TYPE: PRT
     <213> ORGANISM: Mus Musculus
16
     <400> SEQUENCE: 1
17
18
           Met Met Ala Gln Leu Gln Phe Arg Asp Ala Phe Trp Cys Arg Asp
19
           Phe Thr Ala His Thr Gly Tyr Glu Val Leu Leu Gln Arg Leu Leu
20
21
           Asp Gly Arg Lys Met Cys Lys Asp Val Glu Glu Leu Leu Arg Gln
22
23
24
           Arg Ala Gln Ala Glu Glu Arg Tyr Gly Lys Glu Leu Val Gln Ile
25
                                                 55
                             50
26
           Ala Arg Lys Ala Gly Gly Gln Thr Glu Met Asn Ser Leu Arg Thr
27
                                                 70
28
           Ser Phe Asp Ser Leu Lys Gln Gln Thr Glu Asn Val Gly Ser Ala
29
                             80
                                                 85
           His Ile Gln Leu Ala Leu Ala Leu Arg Glu Glu Leu Arg Ser Leu
30
31
32
           Glu Glu Phe Arg Glu Arg Gln Lys Glu Gln Arg Lys Lys Tyr Glu
33
                            110
                                                115
                                                                     120
34
           Ala Ile Met Asp Arg Val Gln Lys Ser Lys Leu Ser Leu Tyr Lys
35
                            125
                                                130
           Lys Thr Met Glu Ser Lys Lys Ala Tyr Asp Gln Lys Cys Arg Asp
36
37
                                                145
38
           Ala Asp Asp Ala Glu Gln Ala Phe Glu Arg Val Ser Ala Asn Gly
39
40
           His Gln Lys Gln Val Glu Lys Ser Gln Asn Lys Ala Lys Gln Cys
41
                            170
                                                175
42
           Lys Glu Ser Ala Thr Glu Ala Glu Arg Val Tyr Arg Gln Asn Ile
43
                                                190
```

Glu Gln Leu Glu Arg Ala Arg Thr Glu Trp Glu Gln Glu His Arg

PAGE: 2 RAW SEQUENCE LISTING DATE: 02/02/2000

PATENT APPLICATION US/09/068,377 TIME: 09:31:32

Input Set: I068377.RAW

45						200					205					210
46		Thr	Thr	Cys	Glu		Phe	Gln	Leu	Gln		Phe	Asp	Ara	Leu	
47				010		215					220			3		225
48		Ile	Leu	Arg	Asn		Leu	Trp	Val	His		Asn	Gln	Leu	Ser	
49				3		230					235					240
50		Gln	Cvs	Val	Lvs		Asp	Glu	Leu	Tvr		Glu	Val	Arq	Leu	
51			4	-	•	245				- 2 -	250			5		255
52		Leu	Glu	Gly	Cys	Asp	Val	Glu	Gly	Asp	Ile	Asn	Gly	Phe	Ile	
53				-	-	260			•	-	265		-			270
54		Ser	Lys	Ser	Thr	Gly	Arg	Glu	Pro	Pro	Ala	Pro	Val	Pro	Tyr	Gln
55						275					280					285
56		Asn	Tyr	Tyr	Asp	Arg	Glu	Val	Thr	${\tt Pro}$	Leu	Ile	Gly	Ser	Pro	Ser
57						290					295					300
58		Ile	Gln	Pro	Ser	Cys	Gly	Val	Ile	Lys	Arg	Phe	Ser	Gly	Leu	Leu
59						305					310					315
60		His	Gly	Ser	Pro	-	Thr	Thr	Pro	Ser		Pro	Ala	Ala	Ser	
61		_	_			320	_		_		325	_		_		330
62		Glu	Thr	Leu	Thr		Thr	Pro	Glu	Arg		Glu	Leu	Val	Tyr	
63				~1	7	335		 1	~1-	~1	340	_				345
64		ser	тте	Glu	vaı		Ala	Thr	GIN	GIY		Leu	Asn	ser	ser	
65 66		~1n	7 ~~	TT	7 ~~	350	T 011	TT	7.00	TT	355	77.	~1 _m	7 ~~	Com	360
66 67		GIII	Asp	Tyr	Arg	365	ьeu	TYL	Asp	Tyr	370	Ата	GIII	ASII	ser	375
68		Glu.	T.011	Asp	Tla		λla	Clv	λαn	Tla		ת ד ת	17 a 1	Tla	Lou	
69		GIU	пец	Asp	116	380	AIA	СТУ	Asp	116	385	Ата	val	116	пец	390
70		Glv	Glu	Asp	Glv		Trn	Thr	Val	G111		Asn	Glv	Gln	Ara	
71		0-1	0	1.02		395				<u></u>	400		017	<u> </u>	9	405
72		Phe	Val	Pro	Glv		Tvr	Leu	Glu	Lvs						
73					•	410	•			4	415					
74	<210>	SEQ	ID 1	NO 2												
75	<211>	LENG	GTH:	2100)											
76	<212>	TYPI	E: Di	A												
77	<213>	ORGA	ANISI	1: Mi	ıs Mu	ıscu]	lus									
78	<400>	SEQU	JENCI	E: 2												
79		caatatttca agctatacca agcatacaat caactccaag cttatgccca 50														
80		agaagaagcg gaaggtctcg agcggcgcca attttaatca aagtgggaat 100														
81		attgctgata gctcattgtc cttcactttc actaacagta gcaacggtcc 150 gaacctcata acaactcaaa caaattctca agcgctttca caaccaattg 200														
82											-					
83				aa c	_	_			_		_			-	_	
84				atg a						-			_	-	_	
85				gcg t								_				
86				ga t	-						-	-	_			
87 88				caa a					_			_	-			
89			_	tg c	_		_					-	-			
90				jca g jct g												
91				jet e					_		_	-	-			
92				at t										_		
93				gc c	-					_	-	_	_	-	-	
94			_	_									~999	_	-	

gtgctactgc agaggctgct ggacggcagg aagatgtgca aggatgtgga 800

94

PAGE: 3 RAW SEQUENCE LISTING DATE: 02/02/2000

PATENT APPLICATION US/09/068,377 TIME: 09:31:32

Input Set: I068377.RAW

```
95
            ggagctgctc agacagaggg cccaggcgga ggagaggtac gggaaggagc 850
 96
            tggtgcagat tgcacgcaaq qctqqtqqcc aqacaqaqat qaattccctq 900
            aggacctcct ttgactccct gaagcagcaa acagagaatg tgggcagtgc 950
 97
 98
            acacatccag ctggccctgg ccctgcgtga ggagctgcgg agcctggagg 1000
 99
            agttccgaga gagacagaaa gagcagcgga agaagtatga ggccatcatg 1050
100
            gaccgtgtcc agaagagcaa gttgtcgctc tacaagaaga ccatggagtc 1100
101
            caagaaggca tatgaccaga agtgcaggga tgcagatgat gctgagcagg 1150
102
            ccttcgagcg tgtgagtgcc aatggccacc agaagcaagt agaaaagagc 1200
103
            cagaacaaag ccaagcagtg caaggagtca gccacagagg cagaaagagt 1250
104
            gtacaggcaa aatatcgaac aactggagag agcgaggacc gagtgggagc 1300
105
            aggagcaccg gactacctgt gaggccttcc agttgcagga gtttgaccgg 1350
106
            ctcaccatcc tccgcaatgc cctgtgggtg cactgtaacc agctctccat 1400
107
            gcagtgtgtc aaggatgatg agctctatga qqaaqtqcqq ctqacccttq 1450
108
            agggctgtga tgtggaaggt gacatcaatg gcttcatcca gtccaagagc 1500
109
            actggcagag agcccccagc tccggtgcct tatcaqaact actatgacag 1550
110
            ggaggtgacc ccactgattg gcagccctag catccagccc tcctgcggtg 1600
111
            tgataaagag gttctctggg ctgctacatg gaagtcccaa gaccacacct 1650
112
            tetgeteetg etgetteeac agagactetg acteceacce etgageggaa 1700
113
            tgagttggtc tacgcatcca tcgaagtgca qqcgacccag qqaaacctta 1750
114
            actcatcage ccaggactae egggeactet acgaetacae tgeacagaat 1800
            tctgatgagc tggacatttc cgcgggagac atcctggcgg tcatcctgga 1850
115
116
            aggggaggat ggctggtgga ctgtggagcg gaacggacaa cgtggctttg 1900
117
            tccctgggtc gtacttggag aagctctgag gaaaggctag cagtctccac 1950
118
            ataceteege cetgactgtg aggteaggae tgtttettte cateacegee 2000
119
            caggcctcac ggggccagaa ccaagcccgg tggtgctggg catgggctgg 2050
120
            121
      <210> SEO ID NO 3
      <211> LENGTH: 48
122
123
      <212> TYPE: PRT
124
      <213> ORGANISM: Mus Musculus
125
      <400> SEQUENCE: 3
            Leu Tyr Asp Tyr Thr Ala Gln Asn Ser Asp Glu Leu Asp Ile Ser
126
127
                                                 10
128
            Ala Gly Asp Ile Leu Ala Val Ile Leu Glu Gly Glu Asp Gly Trp
129
                             20
                                                 25
                                                                     30
130
            Trp Thr Val Glu Arg Asn Gly Gln Arg Gly Phe Val Pro Gly Ser
131
                                                                     45
132
            Tyr Leu Arg
133
                     48
134
      <210> SEQ ID NO 4
      <211> LENGTH: 50
135
136
      <212> TYPE: PRT
137
      <213> ORGANISM: Homo sapien
138
      <400> SEQUENCE: 4
139
            Leu Tyr Gln Tyr Ile Gly Gln Asp Val Asp Glu Leu Ser Phe Asn
140
              1
                                                 10
141
            Val Asn Glu Val Ile Glu Ile Leu Ile Glu Asp Ser Ser Gly Trp
142
                             20
                                                 25
                                                                     30
143
            Trp Lys Gly Arg Leu His Gly Gln Glu Gly Leu Phe Pro Gly Asn
144
                             35
                                                 40
                                                                     45
```

DATE: 02/02/2000 PAGE: RAW SEQUENCE LISTING TIME: 09:31:32

PATENT APPLICATION US/09/068,377

Input Set: I068377.RAW

```
145
            Tyr Val Glu Lys Ile
146
                              50
      <210> SEQ ID NO 5
147
      <211> LENGTH: 50
148
149
      <212> TYPE: PRT
      <213> ORGANISM: Homo sapien
150
      <400> SEQUENCE: 5
151
            Leu Tyr Asp Tyr Gln Glu Lys Ser Pro Arg Glu Val Thr Met Lys
152
153
              1
                               5
                                                   10
154
            Lys Gly Asp Ile Leu Thr Leu Leu Asn Ser Thr Asn Lys Asp Trp
155
                              20
                                                   25
            Trp Lys Val Glu Val Asn Asp Arg Gln Gly Phe Val Pro Ala Ala
156
                              35
157
                                                   40
158
            Tyr Val Lys Lys Leu
159
      <210> SEQ ID NO 6
160
      <211> LENGTH: 50
161
162
      <212> TYPE: PRT
163
      <213> ORGANISM: Homo sapien
164
      <400> SEQUENCE: 6
165
            Leu Tyr Asp Tyr Gln Gly Glu Gly Ser Asp Glu Leu Ser Phe Asp
166
167
            Pro Asp Asp Ile Ile Thr Asp Ile Glu Met Val Asp Glu Gly Trp
168
                              20
                                                   25
169
            Trp Arg Gly Gln Cys Arg Gly His Phe Gly Leu Phe Pro Ala Asn
170
                              35
                                                   40
                                                                        45
171
            Tyr Val Lys Leu Leu
172
      <210> SEQ ID NO 7
173
      <211> LENGTH: 48
174
175
      <212> TYPE: PRT
      <213> ORGANISM: Homo sapien
176
177
      <400> SEQUENCE: 7
178
            Leu Tyr Asp Tyr Gln Ala Ala Gly Asp Asp Glu Ile Ser Phe Asp
179
                                                   10
180
            Pro Asp Asp Ile Ile Thr Asn Ile Glu Met Ile Asp Asp Gly Trp
181
182
            Trp Arg Gly Val Cys Lys Gly Arg Tyr Gly Leu Phe Pro Ala Asn
183
                              35
                                                   40
184
            Tyr Val Glu
185
186
      <210> SEQ ID NO 8
187
      <211> LENGTH: 8
188
      <212> TYPE: PRT
      <213> ORGANISM: Artificial Sequence
189
190
      <220> FEATURE:
191
      <221> NAME/KEY: Artificial Sequence
192
      <222> LOCATION: 1-8
193
      <223> OTHER INFORMATION: Amino acid epitope tag
194
      <400> SEQUENCE: 8
```

PAGE: 5 RAW SEQUENCE LISTING DATE: 02/02/2000 PATENT APPLICATION US/09/068,377 TIME: 09:31:32

ATEMI APPLICATION US/US/UGO, 3// TIME: US:31:

Input Set: I068377.RAW

```
Asp Tyr Lys Asp Asp Asp Lys
   195
   196
                 1
                                  5
   197
         <210> SEO ID NO 9
   198
         <211> LENGTH: 33
   199
         <212> TYPE: DNA
         <213> ORGANISM: Artificial Sequence
   200
         <220> FEATURE:
   201
   202
         <221> NAME/KEY: Artificial Sequence
   203
         <222> LOCATION: 1-33
   204
         <223> OTHER INFORMATION: Synthetic oligonucleotide probe
   205
         <400> SEQUENCE: 9
   206
               cgcggatcca ccatgatggc ccagctgcag ttc 33
   207
         <210> SEQ ID NO 10
   208
         <211> LENGTH: 45
   209
         <212> TYPE: DNA
   210
         <213> ORGANISM: Artificial Sequence
   211
         <220> FEATURE:
   212
         <221> NAME/KEY: Artificial Sequence
   213
         <222> LOCATION: 1-45
   214
         <223> OTHER INFORMATION: Synthetic oligonucleotide probe
   215
         <400> SEQUENCE: 10
   216
               gtacgcgtcg actcacttgt catcgtcgtc cttgtagtcg agctt 45
   217
         <210> SEQ ID NO 11
   218
         <211> LENGTH: 18
   219
         <212> TYPE: DNA
   220
         <213> ORGANISM: Artificial Sequence
   221
         <220> FEATURE:
   222
         <221> NAME/KEY: Artificial Sequence
   223
         <222> LOCATION: 1-18
   224
         <223> OTHER INFORMATION: Synthetic oligonucleotide probe
   225
         <400> SEQUENCE: 11
   226
               tgcctttctc tccacagg 18
   227
         <210> SEQ ID NO 12
   228
         <211> LENGTH: 36
   229
         <212> TYPE: DNA
   230
         <213> ORGANISM: Artificial Sequence
   231
         <220> FEATURE:
   232
         <221> NAME/KEY: Artificial Sequence
   233
         <222> LOCATION: 1-36
   234
         <223> OTHER INFORMATION: Synthetic oligonucleotide probe
   235
         <400> SEQUENCE: 12
               ctccttgagg ttctactagt gggggctggt gtcctg 36
   236
   237
         <210> SEQ ID NO 13
   238
         <211> LENGTH: 39
   239
         <212> TYPE: DNA
         <213> ORGANISM: Artificial Sequence
   240
   241
         <220> FEATURE:
   242
         <221> NAME/KEY: Artificial Sequence
         <222> LOCATION: 1-39
Please Note: `?3> OTHER INFORMATION: Synthetic oligonucleotide probe
```

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

PAGE:

VERIFICATION SUMMARY DATE: 02/02/2000 PATENT APPLICATION US/09/068,377 TIME: 09:31:32

Input Set: 1068377.RAW

Line ? Error/Warning

Original Text

515 W "N" or "Xaa" used: Feature required Pro Xaa Xaa Pro